

HYDRO-PNEUMATIC SUSPENSION SYSTEM
ABSTRACT OF THE DISCLOSURE

A hydro-pneumatic suspension system for a vehicle includes hydraulic struts selectively interconnected, in on-road and off-road configurations, to obviate the need for conventional shocks and springs. In the on-road configuration, the hydraulic struts are linked cross-vehicle with multiple accumulators in the circuit for increased on-road roll stiffness. In the off-road configuration, the hydraulic struts are self-linked, with fewer accumulators, to maximize flexibility and articulation of the system. The system also includes a hydraulic supply to selectively raise and lower the vehicle for the off-road and on-road configurations, respectively. In a further configuration, the roll stiffness and articulation of the suspension system is configured solely by the selective connection of accumulators to the hydraulic suspension circuit.